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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,891	08/02/2001	Brigitte Bathe	211714US0X	5791

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EXAMINER
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FRONDA, CHRISTIAN L

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 02/07/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/919,891

Applicant(s)

Bathe et al.

Examiner

Christian L. Fronda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-34 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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## DETAILED ACTION

### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9, 11, and 12, drawn to an isolated polynucleotide coding for the sigH gene, a vector, an Escherichia coli strain, and an coryneform bacteria strain, classified in class 435, subclass 252.32.
  - II. Claim 10, drawn to a coryneform bacteria in which the sigH gene is enhanced or overexpressed, classified in class 435, subclass 252.1.
  - III. Claims 13-17, 20-22, and 26-28, drawn to a method for the fermentative production of L-amino acids in coryneform bacteria comprising fermenting in a medium coryneform bacteria which at least the sigH gene is enhanced, classified in class 435, subclass 106.
  - IV. Claims 13 and 18, drawn to a method for the fermentative production of L-amino acids in coryneform bacteria comprising fermenting in a medium coryneform bacteria which at least the sigH gene is enhanced and additional genes for the biosynthesis pathway of the desired L-amino acid are enhanced, classified in class 435, subclass 106.
  - V. Claims 13 and 19, drawn to a method for the fermentative production of L-amino acids in coryneform bacteria comprising fermenting in a medium coryneform bacteria which at least the sigH gene is enhanced and the metabolic pathways which reduce the formation of the desired L-amino acid are at least partly eliminated, classified in class 435, subclass 106.
  - VI. Claims 13 and 23, drawn to a method for the fermentative production of L-amino acids in coryneform bacteria comprising fermenting in a medium coryneform bacteria which at least the sigH gene is enhanced and the regulatory properties of the polypeptide for which the polynucleotide sigH codes are increased, classified in class 435, subclass 106.
  - VII. Claims 13 and 24, drawn to a method for the fermentative production of L-amino acids in coryneform bacteria comprising fermenting in a medium coryneform

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bacteria which at least the sigH gene is enhanced and one or more genes are enhanced or overexpressed selected from the group consisting of the dapA, gap, tpi, pgk, zwf, pyc, mqo, lysC, lysE, ilvA, ilvBn, ilvD, and zwa1 gene, classified in class 435, subclass 106.

VIII. Claims 13 and 25, drawn to a method for the fermentative production of L-amino acids in coryneform bacteria comprising fermenting in a medium coryneform bacteria which at least the sigH gene is enhanced and one or more genes are attenuated selected from the group consisting of the pck, pgi, poxB, and zwa2 gene, classified in class 435, subclass 106.

IX. Claims 30 and 31, drawn to a method for identifying RNA, cDNA, and DNA that encode for the sigH protein comprising contacting the RNA, cDNA, or DNA with hybridization probes, classified in class 435, subclass 6.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Each of the products of Groups I and II are independent chemical entities and require different literature searches.

Inventions of Groups III-IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Each of the processes of Groups III-IX are distinct both physically and functionally and require different process steps, reagents, and parameters.

The invention of Group I is unrelated to each of the processes of Groups III-IX. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Each of the processes of Groups III-IX do not require the product of Group I.

Inventions II and (III-IX) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as using coryneform bacteria in a recombinant process for the production of the enhanced sigH protein.

Because these inventions are distinct for the reasons given above and have acquired a

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separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

3. The claims are generic to a plurality of disclosed patentably distinct species. Applicants are required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

For Group VII, the species are each of the dapA, gap, tpi, pgk, zwf, pyc, mqo, lysC, lysE, hom, ilvA, ilvBN, ilvD, and zwa1 genes. If this group is elected, then Applicants must elect only one gene for examination.

For Group VIII, the species are each of the pck, pgi, poxB, and zwa2 genes. If this group is elected, then Applicants must elect only one gene for examination.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian L. Fronda whose telephone number is (703)305-1252. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (703)308-3804. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is (703)308-0196.

A response to this Office Action may be faxed directly to the Examiner whose Fax Number is (703)746-5036 in order to expedite prosecution.

CLF



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